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EXAMINER

THERIAULT, STEVEN B

ART UNIT

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2179

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/743,313	Applicant(s) YANG, HYE-WON	
	Examiner STEVEN B. THERIAULT	Art Unit 2179	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 April 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 3, 5, 8 and 9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3, 5, 8-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is responsive to the following communications: Remarks filed 04/11/2008.

This action is made Final.

2. Claims 1, 3, 5, 8-9 are pending in the case. Claims 1 and 5 are the independent claims. Claims 2, 4 and 6-7 have been cancelled.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35

U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
5. **Claims 1, 3, 5, 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kodimer et al. (hereinafter Kodimer) U.S. Patent No. 5781192 issued July 14, 1998, in further view of Goldstein et al. (hereinafter Goldstein) U.S. Publication 20020143985 published Oct. 3, 2002.**

In regard to **Independent claim 1**, Kodimer teaches an apparatus for executing a multi-clipboard, the apparatus comprising:

Art Unit: 2179

- A basic clipboard and a multi-clipboard in which data is stored by implementing a copy or cut operation, wherein the latest copied or cut data is stored in the basic clipboard, and other data stored in the basic clipboard is stored in the multi-clipboard if said latest copied or cut data has been stored in the basic clipboard (Kodimer See column 5, lines 39-50).
Kodimer teaches there is always a blank space in the memory stack (basic buffer).
Kodimer shows the stack contains multiple clip boards per application (See figure 6b and 6c). The latest copy will be stored in the blank spot and the other locations will contain previously stored data.
- A multi-clipboard executing unit which displays the data, including the plurality of items stored in the multi-clipboard on the output unit, wherein, if a user input indicating a user's selection of one item of the plurality of items included in the displayed data is received, the multi-clipboard executing unit pastes the selected item of the displayed data (Kodimer figure 6b and 9b and column 8, lines 35-57). Kodimer teaches and shows the plurality of items in the multi-clipboard and the user indicating one of the items to paste to the application. The paste command is executed and the item is pasted into the space.

Kodimer does not expressly teach:

- A timer which counts an amount of time after a paste menu is activated
- A basic clipboard executing unit which pastes the data stored in the basic clipboard if the paste menu is selected **before** the amount of time counted by the timer **is greater** than a predetermined amount of time
- if the paste menu is selected after the amount of time counted by the timer is greater than the predetermined amount of time

Goldstein teaches a method of cut/copy and paste operations where the user indicates the specific location they wish to copy information by selecting and holding the keys that correspond to the cut/copy and paste commands (See Para 0022). Goldstein teaches various techniques for using a variety of timed sequences of keystrokes to control an operation such as paste, which

Art Unit: 2179

would provide the structure to allow for a timer to count an amount time since a paste key was activated and only performing an operation after a time has elapsed or before (See Para 22).

Goldstein teaches using a controller to recognize and calculate the time lapse and indicate to the user that the operation is going to be performed. Kodimer and Goldstein teach clipboard operations and they both teach performing a specific action with the paste and copy commands on the interface.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time of the invention, having the teachings of Kodimer and Goldstein in front of them, to modify the system of Kodimer to include the time delay and keystroke sequences of Goldstein to allow for a specific command to be executed at a point in time. The motivation to combine Goldstein and Kodimer comes from the suggestion in Goldstein that the system can recognize certain keystrokes to indicate the users intent to perform a copy/paste or cut function (See Para 18) for the purposes of using the clipboard in a specific way.

With respect to **dependent claim 3**, Kodimer teaches the apparatus wherein the multi-clipboard executing unit displays the data stored in the multi-clipboard in an order in which the data is stored (Figure 9b and 9c) Kodimer shows the buffers are numbered 1-4.

In regard to **Independent claim 5**, Kodimer teaches a method of executing a multi-clipboard, the method comprising:

- Displaying data, including a plurality of items, stored in a multi-clipboard on the output unit wherein the latest copied or cut data is stored in the basic clipboard, and other data stored in the basic clipboard is stored in the multi-clipboard if said latest copied or cut data has been stored in the basic clipboard (Kodimer See column 5, lines 39-50).

Kodimer teaches there is always a blank space in the memory stack (basic buffer).

Kodimer shows the stack contains multiple clip boards per application (See figure 6b and

Art Unit: 2179

6c). The latest copy will be stored in the blank spot and the other locations will contain previously stored data.

- If a user input indicating a user's selection of one item of the plurality of items included in the displayed data is received, the multi-clipboard executing unit pastes the selected item of the displayed data (Kodimer figure 6b, 9b and column 8, lines 35-57). Kodimer teaches and shows the plurality of items in the multi-clipboard and the user indicating one of the items to paste to the application. The paste command is executed and the item is pasted into the space.

Kodimer does not expressly teach:

- Determining whether a predetermined amount of time has passed after a paste menu is activated and displaying if the predetermined amount of time has passed.
- Pasting data stored in a basic clipboard if a signal indicating a user's selection to the paste menu is received before the predetermined amount of time has passed

Goldstein teaches a method of cut/copy and paste operations where the user indicates the specific location they wish to copy information by selecting and holding the keys that correspond to the cut/copy and paste commands (See Para 0022). Goldstein teaches various techniques for using a variety of timed sequences of keystrokes to control an operation such as paste, which would provide the structure to allow for a timer to count an amount time since a paste key was activated and only performing an operation after a time has elapsed or before (Para 22, bottom). Goldstein teaches using a controller to recognize and calculate the time lapse and indicate to the user that the operation is going to be performed. Kodimer and Goldstein teach clipboard operations and they both teach performing a specific action with the paste and copy commands on the interface.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time of the invention, having the teachings of Kodimer and Goldstein in front of them, to modify the

Art Unit: 2179

system of Kodimer to include the time delay and keystroke sequences of Goldstein to allow for a specific command to be executed at a point in time. The motivation to combine Goldstein and Kodimer comes from the suggestion in Goldstein that the system can recognize certain keystrokes to indicate the users intent to perform a copy/paste or cut function (See Para 18) for the purposes of using the clipboard in a specific way.

With respect to **dependent claim 8**, Kodimer teaches the method wherein step (c) further comprises arranging the data stored in the multi-clipboard in the same order that each item of the data is stored (Figure 9b and 9c) Kodimer shows the buffers are numbered 1-4.

With respect to **dependent claim 9**, Kodimer teaches the method wherein the method further comprises (e) pasting the data stored in the basic clipboard by using paste soft keys (See Para 22).

A reference to specific paragraphs, columns, pages, or figures in a cited prior art reference is not limited to preferred embodiments or any specific examples. It is well settled that a prior art reference, in its entirety, must be considered for all that it expressly teaches and fairly suggests to one having ordinary skill in the art. Stated differently, a prior art disclosure reading on a limitation of Applicant's claim cannot be ignored on the ground that other embodiments disclosed were instead cited. Therefore, the Examiner's citation to a specific portion of a single prior art reference is not intended to exclusively dictate, but rather, to demonstrate an exemplary disclosure commensurate with the specific limitations being addressed. In re Heck, 699 F.2d 1331, 1332-33, 216 USPQ 1038, 1039 (Fed. Cir. 1983) (quoting In re Lemelson, 397 F.2d 1006, 1009, 158 USPQ 275, 277 (CCPA 1968) *Upsher-Smith Labs. v. PamLab, LLC*, 412 F.3d 1319, 1323, 75 USPQ2d 1213, 1215 (Fed. Cir. 2005); In re Fritch, 972 F.2d 1260, 1264, 23 USPQ2d 1780, 1782 (Fed. Cir. 1992); *Merck & Co. v. Biocraft Labs., Inc.*, 874 F.2d 804, 807, 10 USPQ2d 1843, 1846 (Fed. Cir. 1989); In re Fracalossi, 681 F.2d 792, 794 n.1, 215 USPQ 569, 570 n.1 (CCPA 1982); In re Lamberti, 545 F.2d 747, 750, 192 USPQ 278, 280 (CCPA 1976); In re Bozek, 416 F.2d 1385, 1390, 163 USPQ 545, 549 (CCPA 1969).

Response to Arguments

6. Applicant's arguments with respect to claims 1, 3, 5, 8-9 have been considered but are not persuasive.

Art Unit: 2179

Applicant's argument that Kodimer is silent as to displaying data that is actually stored

Applicant argues that Kodimer is silent as to displaying the data that is actually stored in the memory buffers because it appears they interpret the drawing as only showing the number of the buffer and not the data (See argument page 3, middle).

The Examiner disagrees.

Kodimer expressly states that the operating system that manages the memory buffers in Kodimer receives a message from the copy stack indicating the kind of data (such as text, graphic, spreadsheet, etc) to the operating system (See column 6, lines 20-30). The operating system then uses the information to display to display indicators 219 that **indicate the contents of the memory buffers**. The screen 6(d) clearly shows an indicator next to each buffer that displays the actual data that is in the buffer. Kodimer states the indicator can be text, icons, thumbnails or other type of symbol, which clear dictates a structure for showing what is in the memory buffer (See column 7, lines 60-67).

Applicant's argument that the memory buffers of Kodimer don't act as a queue

Applicant argues that the memory buffers of Kodimer don't teach or suggest that other data stored in the basic clipboard to stored in the multi-clipboard if the latest copied or cut data has been stored in the basic clipboard, as recited in claim 1 because they interpret the system of Kodimer as not having a queue in which the most recently stored data is stored in a particular memory buffer (See arguments page 3, bottom and page 4, top).

The Examiner disagrees.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., a queue) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). In this case, there is no mention in the claims that the clipboard

acts as a queue. However, the Examiner can see from the drawings and disclosure why the applicant has presented the argument because they explain a queue but the queue process is not in the claim. In response, the office position is based on a key teaching in the disclosure of Kodimer that the "number of memory buffers in the copy stack is automatically increased up to a predetermined number by the operating system so that there is at least one blank space into which data can be stored" (See Kodimer column 5, lines 38-61). The new buffer is the basic clipboard that the examiner is relying on in the claim. Kodimer expressly teaches that between user inputs the system will allocate new memory buffers to the stack for the purpose of having a blank buffer. The user then performs the function or the system automatically assigns the data from the cut or copy operation to the new buffer (See column 5, lines 39-67). Kodimer teaches the next or new available clip board is presented to the user with the blank buffer selected to speed up storage in the buffers (See column 7, lines 35-50), which again indicates a systematic method of storing the data into a basic clipboard and the blank buffer doesn't have anything in it at this point and more importantly states that the allocated space was not there prior to a user inputs. In review, between user inputs the system allocates a new buffer to the stack because all buffers are in use. The user performs the cut operation and then the menu is presented to the user that shows the new buffer. The user can then store the data in the new spot and once the data is stored in a slot then it becomes a part of the multi-clipboard that can be used by any application. Moreover, Kodimer teaches a process where the data can be automatically allocated to the new spot, without user intervention (See column 9, lines 34-40 and figure 12a-b). In summary, the Examiners position is that a new buffer is added that wasn't there before, which effectively increases the copy stack by adding a blank clipboard. The user stores cut or copied data in it and by increasing the number of buffers by one with a buffer and then storing and linking the buffers with sequential slots then the basic buffer becomes a part of the multi-clipboard. It is noted that Kodimer expressly discloses that a buffer is a clipboard (See column 1, lines 26-27). The rationale for examiners position is expressly recited in Kodimer that the improvement over the prior art was to not have a buffer that is erased and reused to cut and copy a data element

Art Unit: 2179

between two applications (See column 1, lines 35-52). By having automatically allocated buffers to a copy stack the system ensures that there will always be a new spot for data. Therefore, the operations described above appear to describe a structure that the data is stored in a basic clipboard that was added to a multi-clipboard when it is stored in the basic clipboard because the new buffer is added to the existing stack that is a multi-clipboard and more importantly the buffer is added in response to user inputs.

Applicant's argument that the combinations of references have not been adequately described

Applicant argues that the Examiner has not provided an explanation of how the systems of Kodimer and Goldstein would have been combined by one of ordinary skill in the art because they interpret the examiners statement as generally asserting that the combination would have resulted in the claimed invention (See argument page 4, bottom).

The Examiner disagrees.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the reference of Goldstein discloses the actual phrase "that various techniques for recognizing such time limited keystroke sequences exist and the invention is not limited in scope to any such technique" used by the examiner in the rejection (See Para 22, bottom). In the same, paragraph Goldstein teaches several techniques for measuring time between keystrokes such as: 1) using a micro-controller to recognize certain key sequences and then start a timer 2) pressing a ctrl key and then waiting a specified amount of time utilizing a counter or timer to determine the time elapsed 3) using the switchbox control to 270 to monitor the lapse between strokes and then directing the system to perform the operation. Therefore, with this disclosure the teachings and

structure of Goldstein are relied upon because the reference clearly teaches in the same paragraph several mechanisms to time the sequence of keystrokes to control the operation of the paste. In the reference Para 20-21, which lead up to the embodiment described in Para 22, a single memory system is described and located within the control. The purpose of tracking time sequences with the control is for the purposes of not confusing the cut and copy commands with the standard known cut and copy commands located on the system (See Para 20). The purposes of tracking the keystroke sequence is to allow the use to enter a series of keystrokes and if the user executes the keystrokes either in within a time limit or with various methods described then the system will copy the information from the storage control 270. If the user does not, then the standard functions are used. **As the examiner argues in the rejection and 103 statement**, the Kodimer reference teaches the user of keystroke combinations (See column 8, lines 1-25 and 55-67). Goldstein teaches timed keystrokes in using multiple keystroke combinations and would provide a structure to control the operation such as "paste" during the use of a clipboard. In summary, the disclosure of Kodimer and Goldstein coupled with the Examiner statements along with the teachings in Goldstein as to the system described in Para 17, that copying and pasting information from buffers, is well known (See page 1, column 2, bottom and page 2, column 1, top) and that the purpose of Goldstein is to provide **"alternative techniques for copying, cutting and pasting information between systems is desirable" and "such operations carried out in a single platform are well known"** (See Para 20) provides the motivation to combine and arrive at the claimed invention.

Applicant's argue that there is no reasonable rationale for combining the prior art

Applicant argues that there is no fathomable reason that the combination of Kodimer and Goldstein would arrive at the claimed invention, because they argue that there is no reason that the structure of Kodimer would motivate someone to wait before they copy or paste **after** Goldstein's time period (see argument page 5).

The Examiner disagrees.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). In this case, and as with most cases the motivation to combine comes from the modifying reference. There were several structural reasons for combining the references. The rejection is based on the embodiment taught in Para 22, which Para 20-21 support where the switchbox is located on a single system and the keystroke combinations for instructing the copy, paste, cut operations have to be modified so that they do not interfere with the standard key stroke combinations. Kodimer is the primary reference and teaches that buffers are clipboards and teaches a process of copying data to multiple buffers (See figure 3, and accompanying text). Goldstein teaches an example of copying using copy/paste buffers and establishes the process is well known in the art (See Para 17). Kodimer teaches the process of using keystroke combinations to control the paste process (See column 8, lines 1-15). Goldstein teaches a process of timing the sequence of the keystrokes to know which operation to perform and teaches that alternative mechanisms for copying, cutting and pasting are desirable. Therefore, the suggestion, structure and motivation are shown in the teachings of Goldstein and when combined with Kodimer provides the motivation to combine and arrive at the claimed invention.

Applicant's argument that Kodimer teaches the menu must be displayed prior to paste

Applicant argues that the menu of Kodimer must be displayed prior to the paste operation so that the user knows which location to paste into and if combined with Goldstein then it would be impossible to paste data before the predetermined amount of time (See argument page 5).

The Examiner disagrees.

Goldstein teaches the "micro-controller can be used to recognize the keystroke sequence,¹ calculate the time elapsed between strokes and then provides an indication that a pre-determined time limited keystroke sequence indicating a paste operation is to be performed" which provides

Art Unit: 2179

the structure when considering **both references** where the keystroke combination of Kodimer can operate normally meaning a blank spot can be added and the paste operation can be checked with the controller of Goldstein. The process described in Kodimer of using the "v" = the "3" key as a customizable keystroke combination to effect the paste operation (See Kodimer column 8, lines 45-67) provides that the user can select and determine when and where the data is to be pasted. Therefore, Goldstein applied to Kodimer would provide that the certain keystroke combination would first allow for a time lapse to occur before pasting the data into an existing space. When considering both references and the teachings for all that they suggest provides the rationale the Examiner has provided above. All of which supports the examiner assertion that the purpose of Goldstein is to allow the user to modify the existing clipboard processes to allow them to customize the keystrokes and timing to which information is stored within a clipboard.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Art Unit: 2179

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven B. Theriault whose telephone number is (571) 272-5867. The examiner can normally be reached on M, W, F 10:00AM - 8:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Weilun Lo can be reached on (571) 272-4847. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Steven B Theriault/
Patent Examiner
Art Unit 2179